STATE OF CALIFORNIA

SECRETARY OF STATE

PUBLIC HEARING ON

REQUEST FOR APPROVAL OF TECHNOLOGY VOTING

Thursday, September 27, 2017 9:00 A.M.

Election Systems and Software

Secretary of State Building

Auditorium

1500 11th Street

Sacramento, California

Reported by:

Peter Petty

#### **APPEARANCES**

## STAFF

Susan Lapsley

Robbie Anderson

John Hanafee

NaKesha Robinson

Rodney Rodriguez

Todd Ross

## CONTRACTORS AND CONSULTANTS

Mike Santos, SLI Compliance (via Skype)

Waldeep Singh, Dominion Voting Systems

Paul Kraft, Freeman, Kraft & McGregor Consulting Group

Steve Pearson, Election Systems & Software

Bryan Finney, Democracy Live

John Schmitt, Five Cedars Group, Inc.

## PUBLIC COMMENT

Kim Alexander, California Voter's Foundation

Cindy Smith, State Council on Developmental Disabilities

Jeff Thom, California Council of the Blind

Diana, on behalf of Fred Nisen, Disability Rights California

# **APPEARANCES**

# PUBLIC COMMENT

Lynda Johnson

Michael Nunez, Rosen, Bien, Galvan & Grunfeld

James Gump

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## PROCEEDINGS

2 | September 27, 2017 9:05 A.M.

3 | Testing? Okay. Good morning everyone. I am

4 | NaKesha Robinson with the California Secretary of

5 | State, Office of Voting Systems Technology

6 Assessment. I was the lead analyst on the testing

7 on the Election Systems and Software's EVS

 $8 \mid 5.2.1.0$ , now CA system.

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The system -- we received an application for the system in September of last year. Soon thereafter, we contracted with Freeman, Craft & McGregor Consulting Group, also known as FC&G through the Competitive California Bid process.

Testing of the EVS 5.2.1.0 CA system began in late March of this year and concluded, initially, around the end of June. We conducted all of the standard phases of testing, functional, source code review, red team (phonetic) or security, volume and accessibility. The system was tested under the Voluntary Voting System Standard, or VVSG.

I will not go into specific details as the reports do speak for themselves, and they are posted out on our public website. Rather, I'd like to lead into why we determined the new

version number.

At the conclusion of our initial testing, reports were issued, specifically the Red Team and Security Report. In those reports there were a number of vulnerabilities identified which we felt had to be mitigated, so the Secretary of State staff and ES&S jointly agreed on a path to mitigation.

Subsequently we reassembled our test team, including Secretary of State staff, FC&G, as well as ES&S staff. Over the course of about one week we applied patches to the EVS 5.2.1.0 CA system, including addressing multiple operating system vulnerabilities, an unquoted (phonetic) service path vulnerability, an AMT specific to Dell hardware vulnerability, and AMT is active management technology.

Also, in addition to those patches and scripts that were ran, we also conducted and additional tamper evidence seal testing. The seals that were initially provided were not adequate enough to determine that -- I'm losing my train of thought, sorry -- they were not adequate enough to provide evidence that the seals had been tampered with, so ES&S provided us with additional

- 1 seals that are available out there on the market.
- 2 | Six were tested, an approximately one, which we
- 3 refer to as the red and white seal, performed to a
- 4 | standard that was acceptability and properly left
- 5 evidence of tampering
- 6 We also completed additional progression
- 7 | testing after all the scripts and patches were
- 8 applied to the system. And thus, with those
- 9 patches and scripts being applied to the initial
- 10 | system the name change, 5.2.1.0 CA, specific to
- 11 | California.
- 12 | With that, I will open the floor up to
- 13 | Paul Kraft of Freeman, Kraft & McGregor, to
- 14 present the consultant's report.
- MR. KRAFT: Good morning. I'm Paul
- 16 Kraft. I'm one of the partners from Freeman,
- 17 | Kraft & McGregor Group. We have been doing
- 18 | certification testing for the Secretary of State
- 19 of California for about 12 years, since our
- 20 | company began business, basically, in December of
- 21 2005.
- I think Mr. Ross did an excellent job of
- 23 describing the process, the same process that
- 24 | everybody uses, so I won't go into that.
- 25 | Additionally, our reports have been very carefully

written with about 14 people contributing, the Secretary of State also approving and giving final approval to those reports, making sure that we cover everything that's important to them, so I think the reports speak for themselves.

Excuse me.

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It's really all of the people who contributed to these reports, frankly, in their subject area, know more about what they're talking about in the report than I do, so there's really nothing I can elaborate on.

As with the other system, we ran a functional test which simulates conduct end to end of a primary and general election, a vote center primary, a recall, and a rank choice voting election. We found really no anomalies in functional testing. The volume test was run, covering the DS 200, the AutoMARK and the ExpressVote. We found some reliability issues with the AutoMARK. It has improved, I think, slightly over previous generations, but it was subject to a small number of ballot jams during the process.

The ExpressVote performed in volume testing with no anomalies at all.

The DS 200 had a few jams. Most of those jams, though, were either an error in test setup, or basically a voter who was being overly aggressive feeding ballots.

In accessibility testing we were a little disappointed. We could only raise a group of, I believe, five or six volunteers for that testing. They also, you know, had a very narrow selection of disabilities. We had, I believe it was three people with visual disabilities, and two people with mobility or skeletal-muscle issues. Everybody was able to successfully vote a ballot, except one gentleman who required us to basically hold the accessibility keypad for him. But we felt with a properly trained poll worker assisting him, and perhaps a table for him to set that device on, he could have also voted somewhat independently.

And source code review, there were really no show-stopping issues. There were a number of compliance findings, compliance with the VVSG, fairly were all low-level vulnerabilities and nothing that basically gives a high level of risk.

And our security review, basically that's already been described. There were a number of

1 vulnerabilities, but there were three that 2 basically concerned the Secretary. Two of those 3 ES&S successfully addressed, the unquoted service path and Microsoft patches. We also, while we 4 5 were in tests, were able to address the AMT 6 vulnerability. That Intel active management 7 technologies, something discovered about six 8 months ago. This vulnerability allows anyone to 9 come in remotely and bypass the administrator and 10 user passwords, fire up the system remotely, and 11 do anything inside of it that they want to. 12 is something that Intel put into the chip to make 13 it easy for people running data centers to do 14 maintenance and auditing of equipment. 15 Intel came up with a patch for that, 16 actually, I think it was Wednesday of last week. 17 So we went ahead and put that on the system and

are supplemental testing.

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The supplemental test, basically, was designed to go through all those patches, make those patches part of the trusted build for the Secretary, and the to verify that the system still In verifying it, we reran the large vote center primary election, and we reran the general election, and ran those elections end to end,

including tabulating ballots, printing reports,
and verifying there were no anomalies.

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So that's pretty much. I encourage you to read the reports. We're very proud of them.

We have taken great pains to try to put them into language that does not require the reader to have real specialized knowledge of either technology or elections.

So thank you very much.

MS. LAPSLEY: Thanks, Paul.

So again, all the reports are available on our website.

I did neglect to mention before we started that all of the systems, all four system are set up in the back for those of you who may want to, if we have an intermission or at lunch or after the hearing is over, to touch and feel and play around with them. And the respective vendors are there to be able to answer any questions that you may have, as well.

With that, ES&S, do you guys -- would you like to come down and introduce yourself, say hi, answer/address any issues or concerns? Please state your name for the stenographer.

MR. PEARSON: Okay.

1 MS. LAPSLEY: That one should work.

2 MR. PEARSON: Okay. Well, good morning.

3 | My name is Steve Pearson. I am Vice President of

4 | Voting Systems for ES&S. My primary responsibility

5 | is to oversee the federal testing and state

6 certification for the company.

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I really want to commend the Secretary of State's staff, Freeman, Kraft & McGregor, and I want to recognize Brooke Thernes from ES&S and the ES&S team for this test campaign. I want to -- we certify systems in well over 40 states, about 45 states. And I've been doing this for a long time, probably almost 17 years. So -- but I want to commend this staff and the procedure because it is truly one of the best test processes in the country from our vantage point and our viewpoint. It is. What it does is it ensures the state and the counties and the voters and the State of California that they're getting good, reliable,

21 So really, that's all my comments. I 22 wanted to thank you all for that.

secure systems at the end of the day.

MS. LAPSLEY: Great. Thank you.

So I have only one speaker card. Again,
if there -- if anyone else would like to speak on

this system, please raise your hand and Rodney can
bring a card to you.

But, Kim, you are the only speaker card that I have. And I know you already did so for the previous comment, but can you state your name for the stenographer again please?

MS. ALEXANDER: Hi. I'm Kim Alexander with the California Voter Foundation. I do want to thank you for the detailed reports on the vendors that you've published on your site. They are incredibly useful and they do set a high standard for how states should approach their voting system certification process.

I did download all the reports I could see at five o'clock last night and I did not see those supplemental reports, so my remarks about what was available at that time. I will take time to go through and read those.

I want to share with you that throughout the year I have been participating in Southern California County's implementation of the Voter's Choice Act, and I am following, as best as I can, the county's acquisition process for procuring new voting equipment. And I'm concerned that Sacramento has put itself on a tight timeline to

1 purchase new equipment. They have taken bids from companies up today for certification. And I hope 3 that this does not put pressure on the Secretary 4 of State, as has happened in the past, to rush to certify equipment that has issues.

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And I'm happy to learn today that you have been addressing the very serious security issues that were identified in the August reports that were published on the Secretary of State's Those security issues were raised not website. just by me but by other people working in other states dealing in ES&S equipment. And so it's illuminating for the whole country to see what you have identified, so I appreciate that.

You know, when counties make voting equipment purchases they are hoping and expecting to use the equipment that they're buying for at least ten years. So the last time around, in 2002, we rushed certification before systems -before security issues were fully addressed. as a result, millions of dollars were wasted on equipment that was not usable to California standards, so I want to make sure we don't do that again.

I have urged Sacramento County to take a

little bit more time in its procurement process,
since there are so many other vendors in the
certification pipeline, which I'm also very happy

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to see.

Several other counties are also like to purchase new equipment as they make plans to implement the Voter's Choice Act. This includes San Mateo, Nevada, Napa, and possibly Sutter. in light of this, I suggest that the Secretary of State organize a public vendor fair for vendors to come and demonstrate their equipment, not just in the back of the room which is just a piece of it, but the whole end-to-end process, so the registrars and voter advocates and any interested person who wants to try it out can do so and ask questions, before their counties go out and make these very important purchases. You know, we're not just buying a new Wi-Fi system for some government office, we're buying the equipment that people will use to cast their votes, so I think the public should have more of a look into those systems before those counties make those And I hope your office will acquisitions. consider helping to facilitate that, and I'm happy to support that if you can organize one.

1 Thank you.

MS. LAPSLEY: Great. Thank you, Kim.

3 And then, Cindy Smith, you had some

4 | general comments, not necessarily specific to this

5 | system, but general comments. And again, I'd ask

6 | that you just state your name for the

7 | stenographer.

8 MS. SMITH: Good morning. My name is

9 | Cindy Smith, and I am the Deputy Director for

10 | Public Policy at the State Council and Development

11 Disabilities. I'm sorry. I'm a little bit

12 | taller, I guess. We're pleased to be able to

13 offer a general comment today.

14 As background, close to 50 years ago,

15 | congress created the State Council for

16 | Developmental Disabilities in every state and

17 | every territory to ensure individuals with

18 | developmental disabilities have access to services

19 and supports that ensure that they can realize

20 | self-determination, independence, productivity,

21 | integration and inclusion in all aspects of

22 community life. We do this work through advocacy,

23 | capacity building and systemic change activities.

24 We will be offering written testimony,

25 but we wanted to take a moment to acknowledge

- 1 | you're inclusion of our Self-Advocacy Advisory
- 2 | Committee as you prepared for this meeting today.
- 3 | In July you came and previewed the two first --
- 4 | the two versions of the technology that were
- 5 discussed first this morning. And the Council
- 6 asked me to come and just briefly thank you for
- 7 | the inclusion of the Self-Advocacy Advisory
- 8 | Committee.
- 9 The members of the Committee are nine
- 10 | individuals with intellectual and developmental
- 11 disabilities. They greatly appreciate having the
- 12 opportunity to preview the systems, watch the
- 13 presentations, and provide preliminary feedback as
- 14 | you prepare for this meeting today. We encourage
- 15 | you to continue to include the Self-Advocacy
- 16 | Advisory Committee and the Council as you continue
- 17 to work forward to approving these voting systems.
- 18 So thank you for the inclusion of the
- 19 | Council and the Self-Advocacy Advisory Committee.
- 20 | And we encourage you to continue to include self-
- 21 | advocates moving forward.
- MS. LAPSLEY: Great. Thank you very
- 23 | much. And thanks for allowing us to take part in
- 24 | it.
- 25 MS. SMITH: Absolutely. Thank you.

#### REPORTER'S CERTIFICATE

I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were reported by me, a certified electronic court reporter and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

And I further certify that I am not of counsel or attorney for either or any of the parties to said hearing nor in any way interested in the outcome of the cause named in said caption.

IN WITNESS WHEREOF, I have hereunto set my hand this 11th day of October, 2017.



PETER PETTY CER\*\*D-493 Notary Public

#### CERTIFICATE OF TRANSCRIBER

I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were transcribed by me, a certified transcriber and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

And I further certify that I am not of counsel or attorney for either or any of the parties to said hearing nor in any way interested in the outcome of the cause named in said caption.

I certify that the foregoing is a correct transcript, to the best of my ability, from the electronic sound recording of the proceedings in the above-entitled matter.

October 11, 2017

MARTHA L. NELSON, CERT\*\*367

Martha L. Nelson